Claims

1. A detector circuit to be used for measuring current by means of substantially identically wound ring core transformers, in which magnetomotive forces are induced by a main current (I₅), said magnetomotive forces being counteracted by magnetomotive forces induced by a compensating current (i₄), and where two of the ring core transformers (2, 3) are magnetized in antiphase by means of a modulation current, said detector circuit optionally also including a synchronous rectifier for generating an adjusting signal for the compensating current, and where means are provided for compensating for possible differences between the two ring core transformers (2, 3), characterised by the means for compensating for possible differences between the ring core transformers (2, 3) being formed by a common winding (L6) surrounding the two ring cores (2, 3), said common winding (L6) detecting a possible error signal used in a negative feedback loop which automatically seeks to establish an equilibrium.

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- 2. A detector circuit according to claim 1, characterised by the negative feedback loop being provided by adding the error signal to the modulation signal in such a manner that said error signal is reduced and automatically seeks to reach zero.
- 20 3. A detector circuit according to claim 1 or 2, characterised by the modulation signal being supplied from the outside.
 - 4. A detector circuit according to claim 1 or 2, characterised by being astable, the modulation signal being provided by means of a built-in multivibrator.

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- 5. A detector according to claim 4, characterised by the multivibrator including a Schmitt trigger (A4).
- 6. A detector circuit according to one of the preceding claims, characterised in that an additional core (4) is added, said additional core not entering saturation because it is not supplied with a modulation signal, said additional ring core (4) being adapted to

compensate for the ring cores (2, 3) receiving said modulation signals being able to go into saturation.